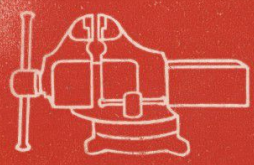
Desmond Simplex

# Desmond-Simplex

STEEL SLIDE

# VISES

THE DESMOND-STEPHAN MFG. CO., URBANA, OHIO

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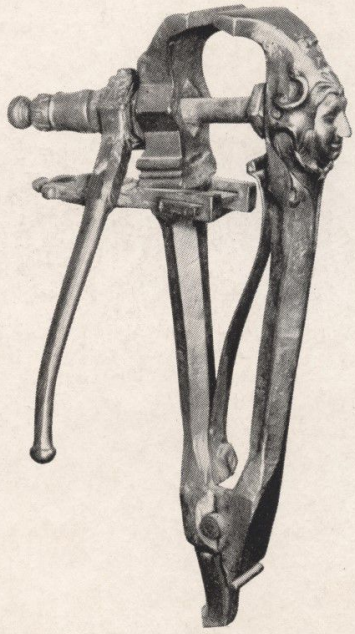
Catalog 60

# Desmond Simplex

FOR EVERY INDUSTRIAL REQUIREMENT
FOR SCHOOLS AND HOME WORKSHOP

The contemporary design of Desmond-Simplex Vises offers ease of operation, economy, and accuracy never before available in history.

Throughout the past several hundred years vises have been a basic tool for man's progress and today Desmond-Simplex leads the way with improved design and production methods. The vise shown in this photograph is of German origin, hand made in the 17th Century. Note how the handle works from the back jaw, requiring the user to remove and replace handle for each revolution of main screw.



Courtesy John Woodman Higgins Armory

THE DESMOND STEPHAN MFG. CO., URBANA, OHIO

Sales Offices:

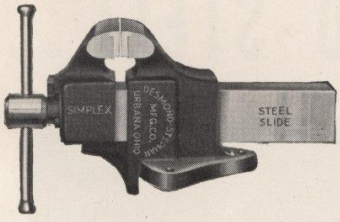
74 Murray St.
New York 7, New York

34 No. Clinton St.
Chicago 6, Illinois

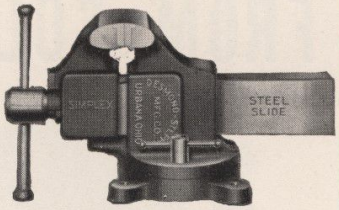
3922 Berryman Ave.
Culver City, California

# GREATER STRENGTH-CAPACITY-VALUE

## PLUS IMPROVED DESIGN




Machinists
Stationary Base page 8




Machinists
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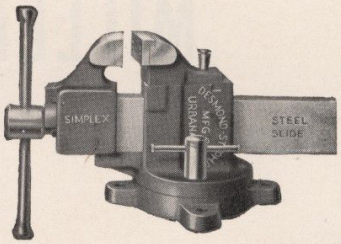


Machinists—Swivel
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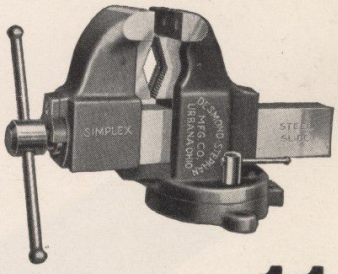
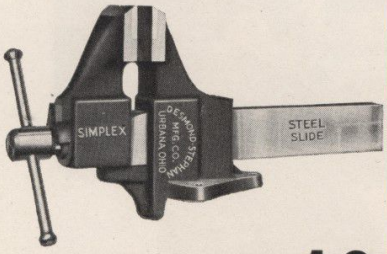



Combination
Bench and Pipe page 11




Sheet Metal
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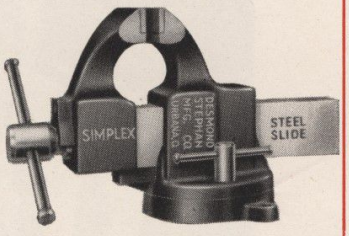
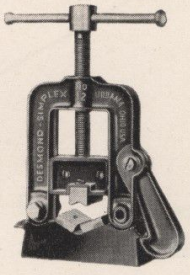



Filers
Swivel Base page 13

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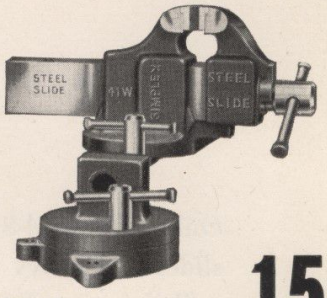
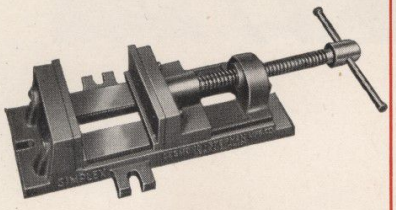



Positioning page 15



Drill Press and Milling Machine

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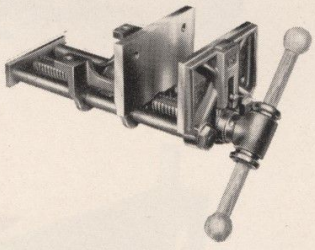
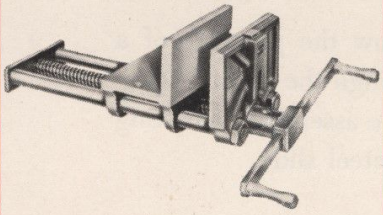


Woodworkers—Wood
Handle—Quick Acting
or Continuous page 18



Woodworkers—
Steel Handle—
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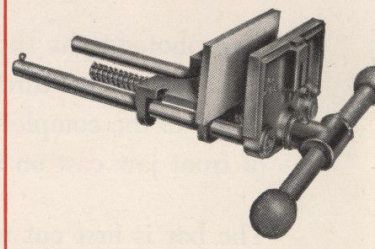
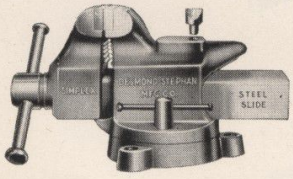


Woodworkers—
Economy Model—
Continuous Screw page 19

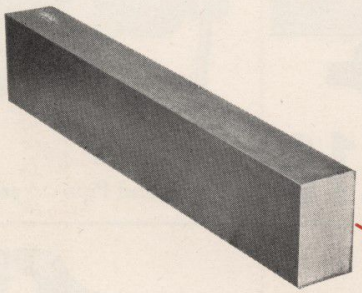


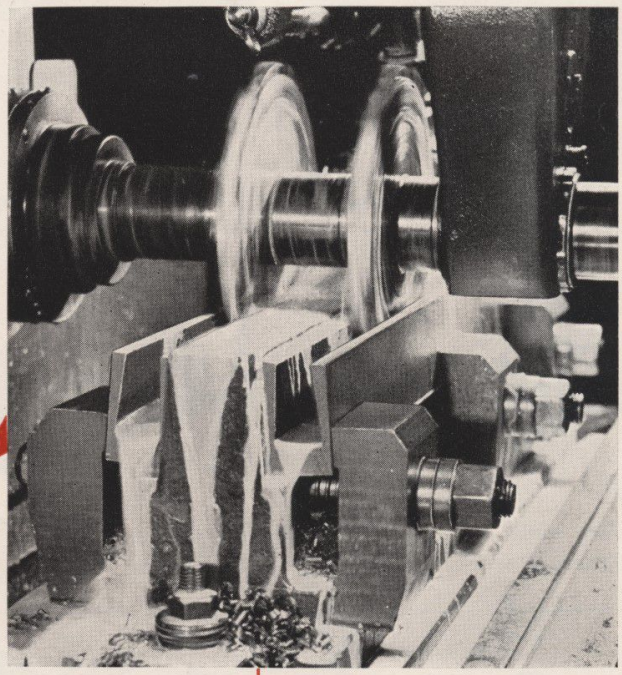

Utility Models—Economy Priced

pages 20-21

The Desmond-Simplex vise line is a quality line throughout and offers a complete selection of types and sizes. Many extra features and fine details of construction give these vises extra values at no premium in price. Stocked, serviced, and represented by selected Industrial Distributors. Specify Desmond-Simplex with confidence.

# EXCLUSIVE DESMOND-SIMPLEX STEEL SLIDES MILLED FROM SOLID STEEL . . .

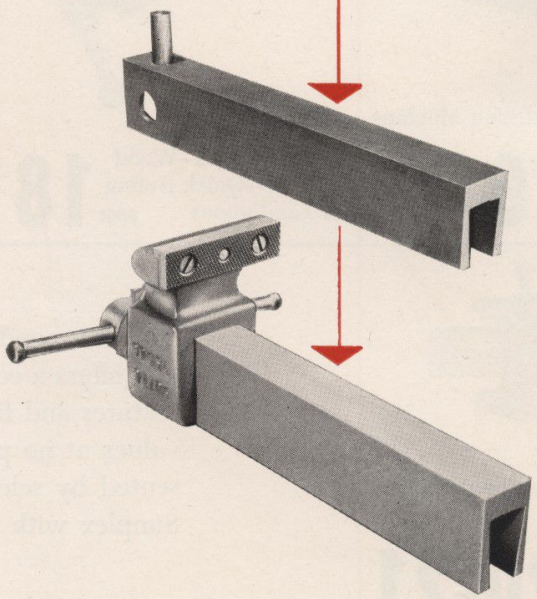




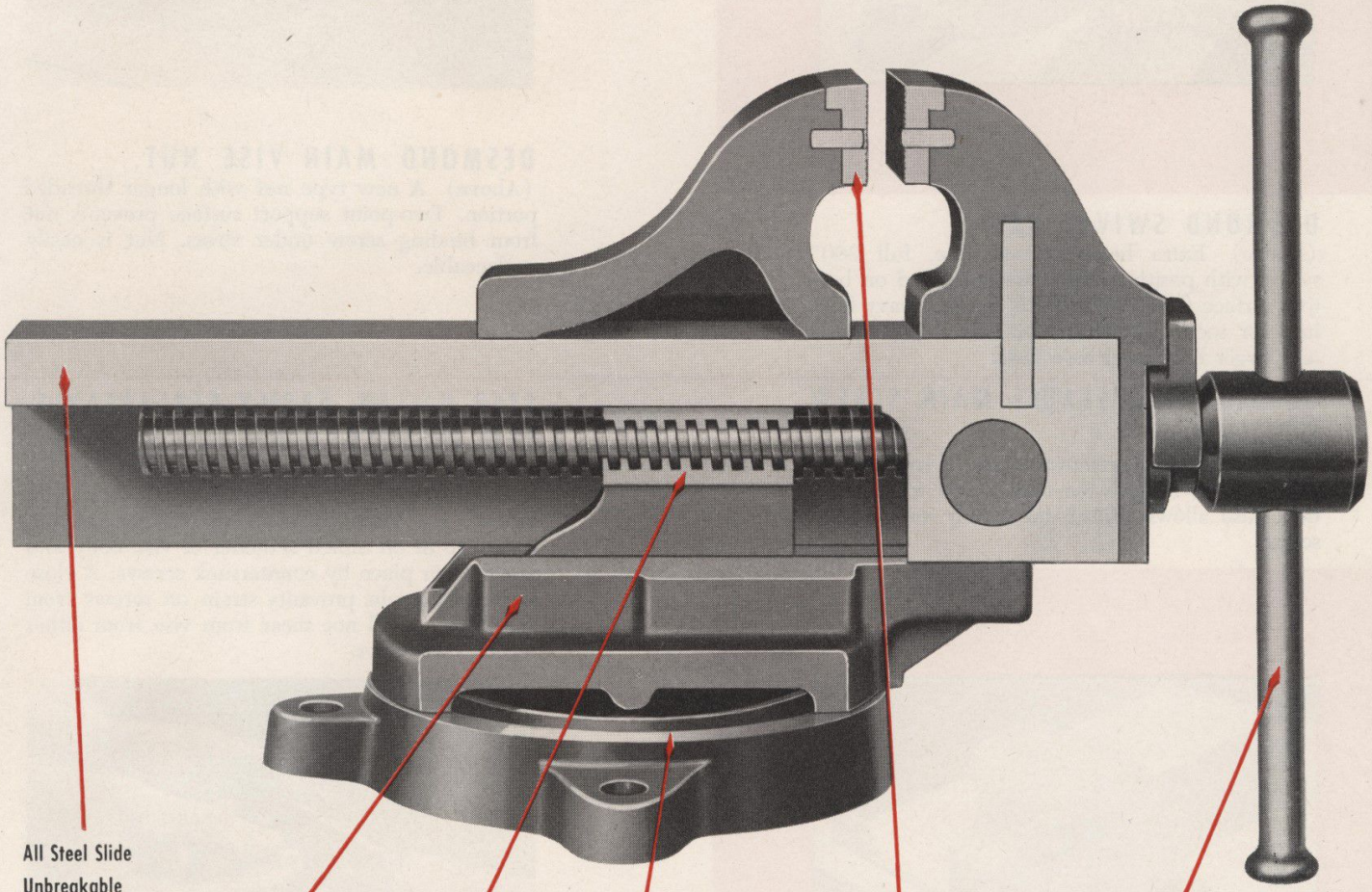
Only Desmond-Simplex vises have steel slides. All heavy duty models have slides milled from solid bar stock steel; this assures extra strength and greater capacities.

The photographs show the progress of a solid bar of steel through the milling operations to the complete assembly consisting of front jaw cast on steel slide.

The bar is first cut to proper length then milled to provide an opening for the main vise screw and nut to be positioned in the slide. Holes are then drilled and a pin inserted in the end of the slide to insure that the slide and the front jaw are an integral assembly. Milling furnishes a slide with the proper size and shape. Desmond-Simplex steel slides are unbendable—unbreakable—ready for the toughest jobs.



# GREATER STRENGTH CAPACITY-VALUE



All Steel Slide
Unbreakable
Unbendable

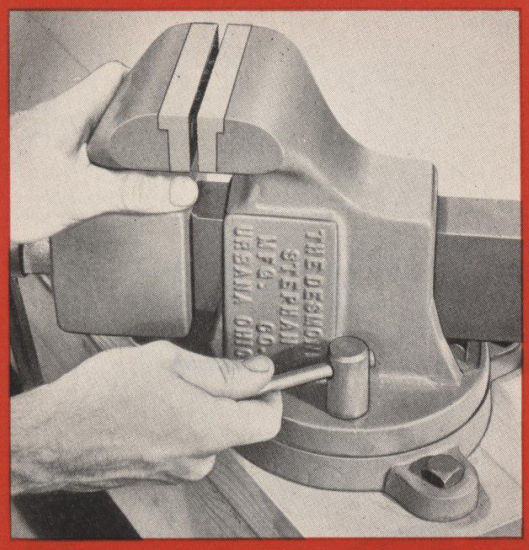
Vise Body—Extra heavy semi-steel. Accurately machined and broached.

New Type Nut—stronger, with two-point support to assure smooth screw operation, without binding.

Full 360° Swivel Base Locks in any horizontal position. Positive—Sure. Larger models have twin locks.

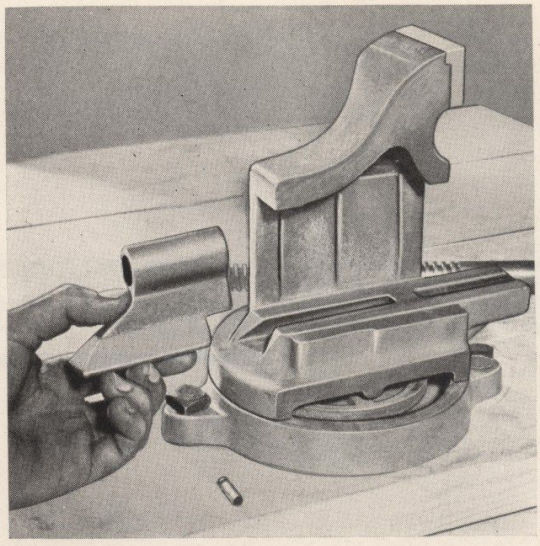
Jaw Inserts—Easily replaceable, will not shear off. Special steel with deep diamond serrations or smooth faces.

One Piece Handle—No separate ends to come loose. Made of one piece of steel with non-pinching type ends.



## DESMOND SWIVEL BASE.

(Above) Extra heavy swivel base, full 360° swivel with positive lock. Base machined on bottom surface for accurate fit to bench. Heavy base lugs for secure mounting. Number "43" models and larger have twin base locks.

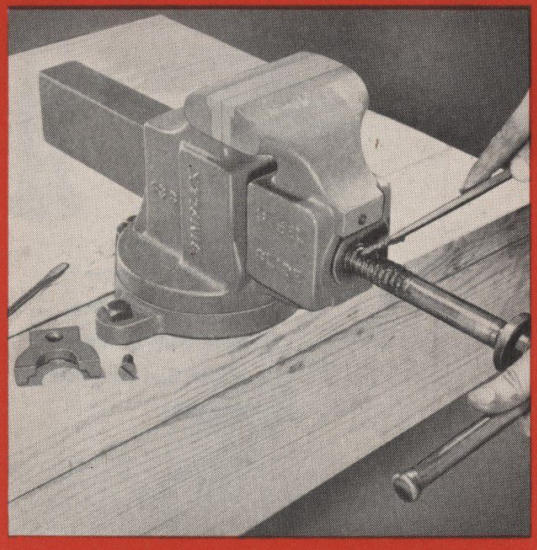


## DESMOND MAIN VISE NUT.

(Above) A new type nut with longer threaded portion. Two-point support surface prevents nut from binding screw under stress. Nut is easily replaceable.

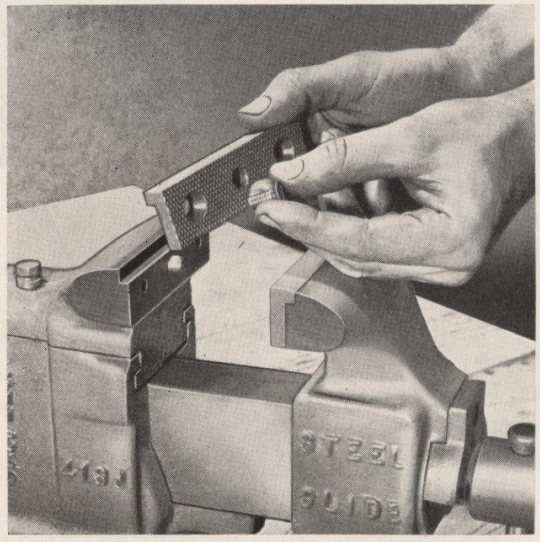
## OUTSIDE ADJUSTABLE MAIN SCREW RETAINER.

(Below) Outside removable screw retainer enables user to remove the main screw for lubrication. Also allows adjustment of any end play in screw.



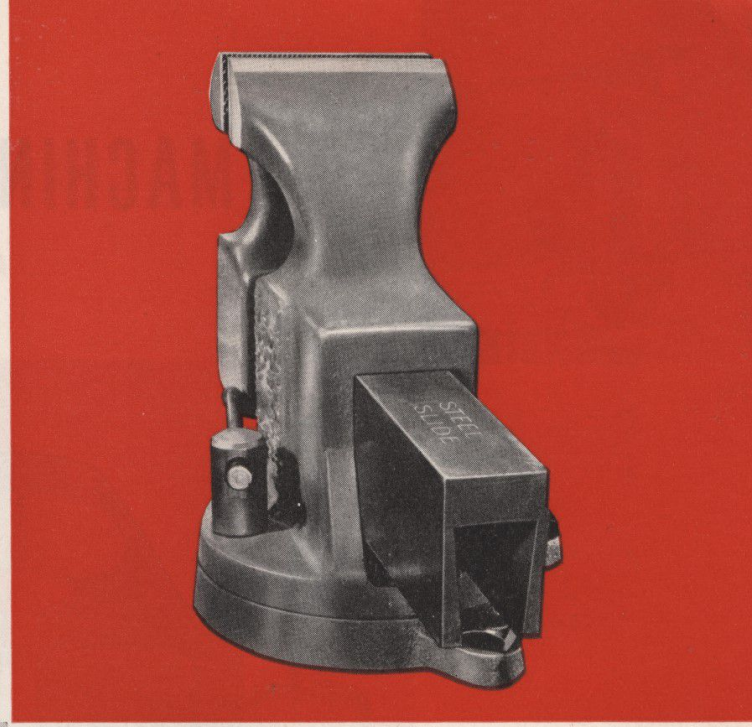
## STEP-MILLED, EASILY REPLACEABLE, JAW INSERTS.

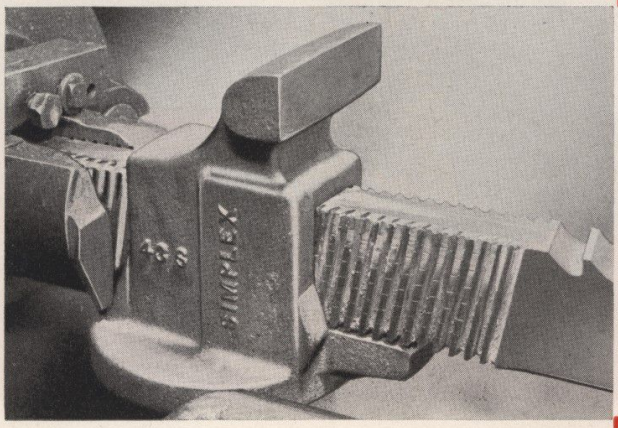
(Below) Manufactured from special steel, carefully oil hardened with deep diamond serrations. Smooth jaw faces are available. Inserts are step milled to fit on milled shoulder of vise body and are held in place by countersunk screws. A close fitting drive pin prevents strain on screws from side blows. Will not shear from vise from either top or side blows.



## MACHINED VISE BODY.

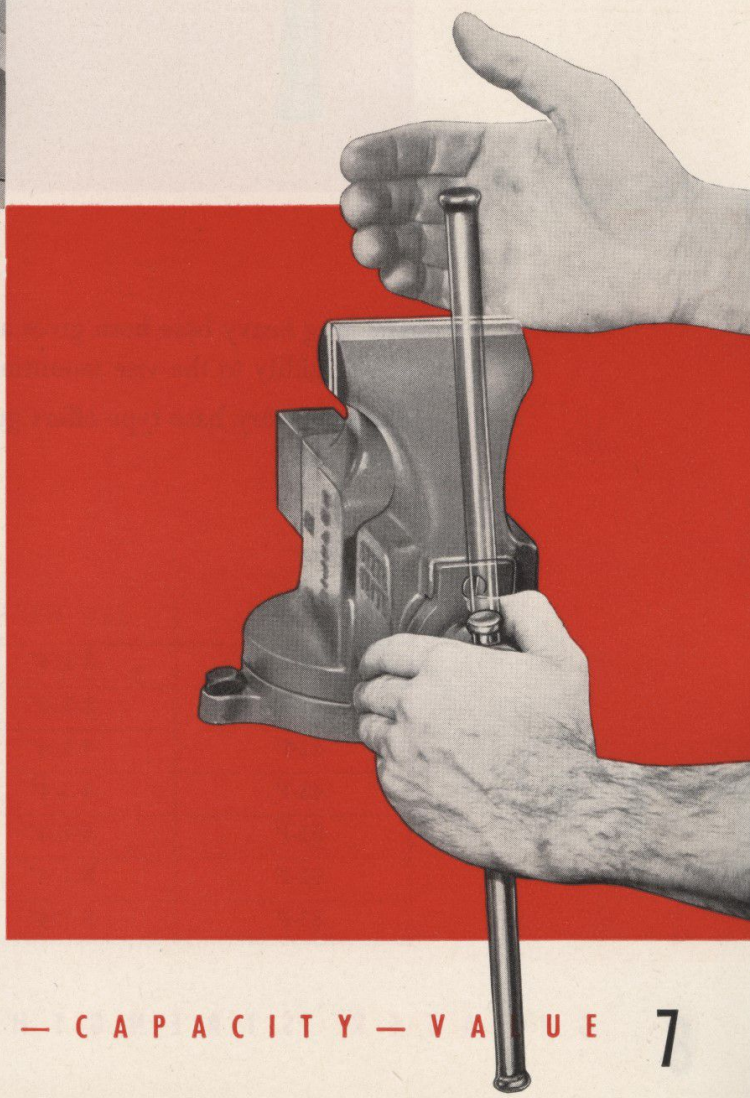
Each Desmond-Simplex heavy duty vise has the back jaw broached. This operation (shown below) insures accurate fit and alignment of the steel slide in the back jaw as shown at the right. Initial accuracy prevents binding or distortion and thus smooth vise operation, even under severe usage, is maintained.

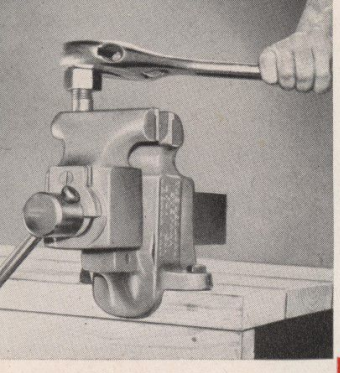



## DESMOND-SIMPLEX ONE-PIECE NON-PINCHING TYPE HANDLE.

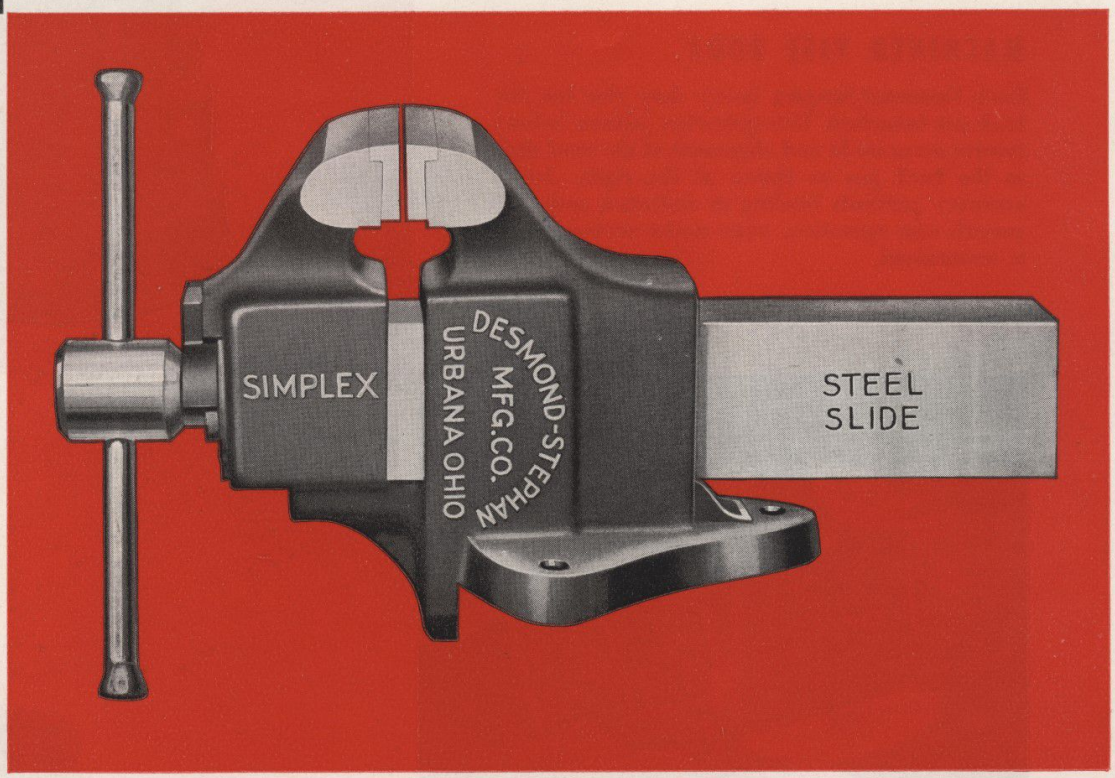
(Right) One-piece handles have ends formed from shank steel. No separate ends to pinch or loosen. Handles are smoothly finished, designed for comfortable gripping and shaped to prevent pinched fingers.





# MACHINISTS

## STATIONARY BASE



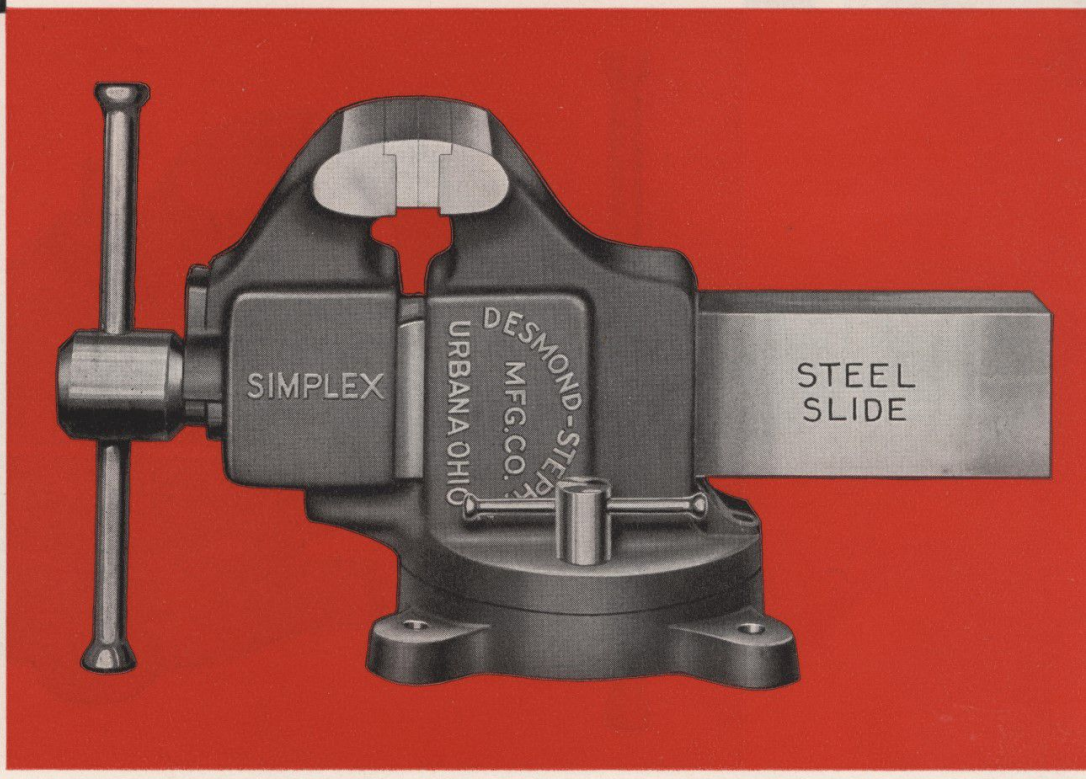

The long heavy base horn gives added support to the vise body thus giving extra rigidity to the vise mounting on the bench.

The stationary base type offers greatest stability for pounding and bending operations.

| VISE NO. | JAW WIDTH | JAW OPENING | WEIGHT LBS. |
|---|---|---|---|
| 31-P | 3-1/4″ | 5″ | 21 |
| 33-P | 3-3/4″ | 5-1/2″ | 30 |
| 41-P | 4-1/4″ | 6-1/2″ | 42 |
| 43-P | 4-3/4″ | 7″ | 60 |
| 51-P | 5-1/4″ | 8″ | 70 |
| 61-P | 6-1/4″ | 10-1/2″ | 127 |
| 81-P | 8-1/4″ | 14″ | 231 |

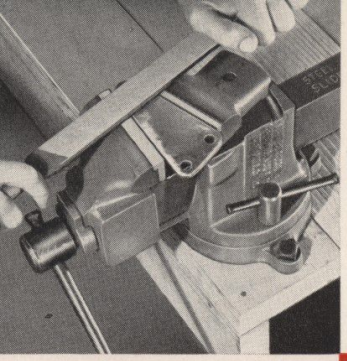
# MACHINISTS

## SWIVEL BASE



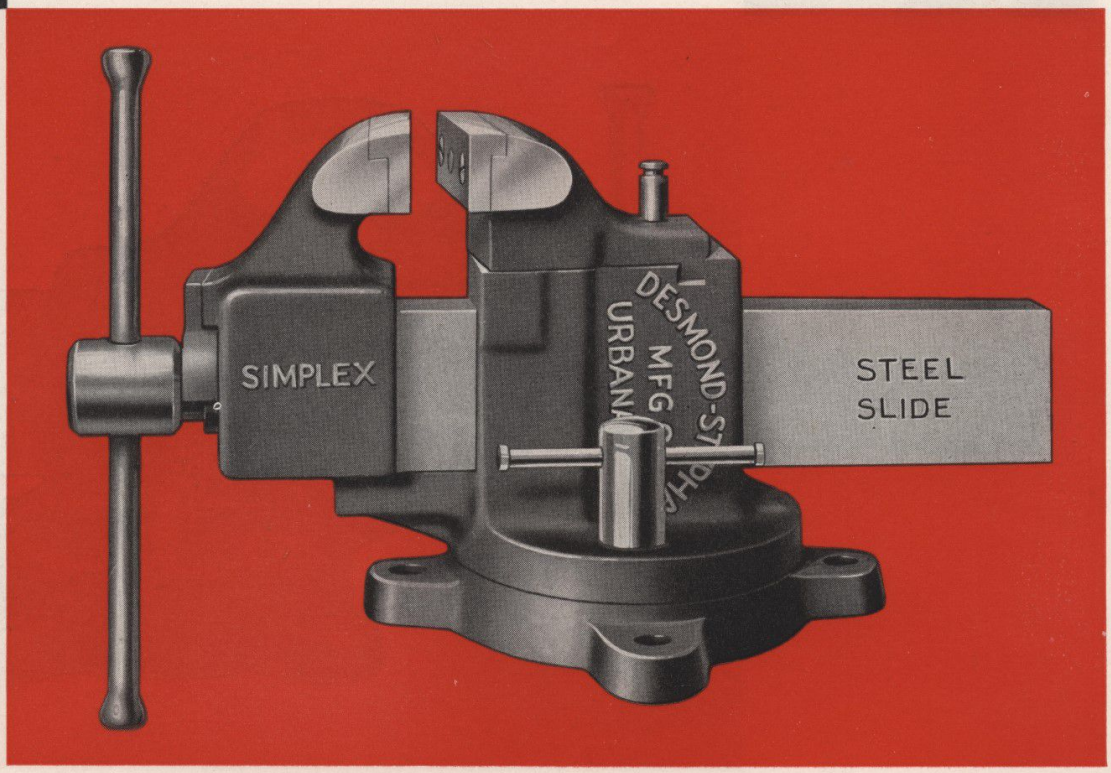

The extra heavy base allows convenient positioning of these vises—yet retains the strength of the stationary base models. The base may be swiveled a full 360°. A positive locking device secures the vise at desired position. Number 43-S and larger models have double base locks.

| VISE NO. | JAW WIDTH | JAW OPENING | WEIGHT LBS. |
|---|---|---|---|
| 31-S | 3-1/4″ | 5″ | 25 |
| 33-S | 3-3/4″ | 5-1/2″ | 35 |
| 41-S | 4-1/4″ | 6-1/2″ | 46 |
| 43-S | 4-3/4″ | 7″ | 70 |
| 51-S | 5-1/4″ | 8″ | 90 |
| 61-S | 6-1/4″ | 10-1/2″ | 145 |
| 81-S | 8-1/4″ | 14″ | 250 |



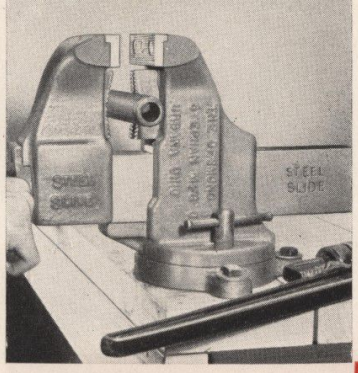
# MACHINISTS

## SWIVEL JAW—SWIVEL BASE



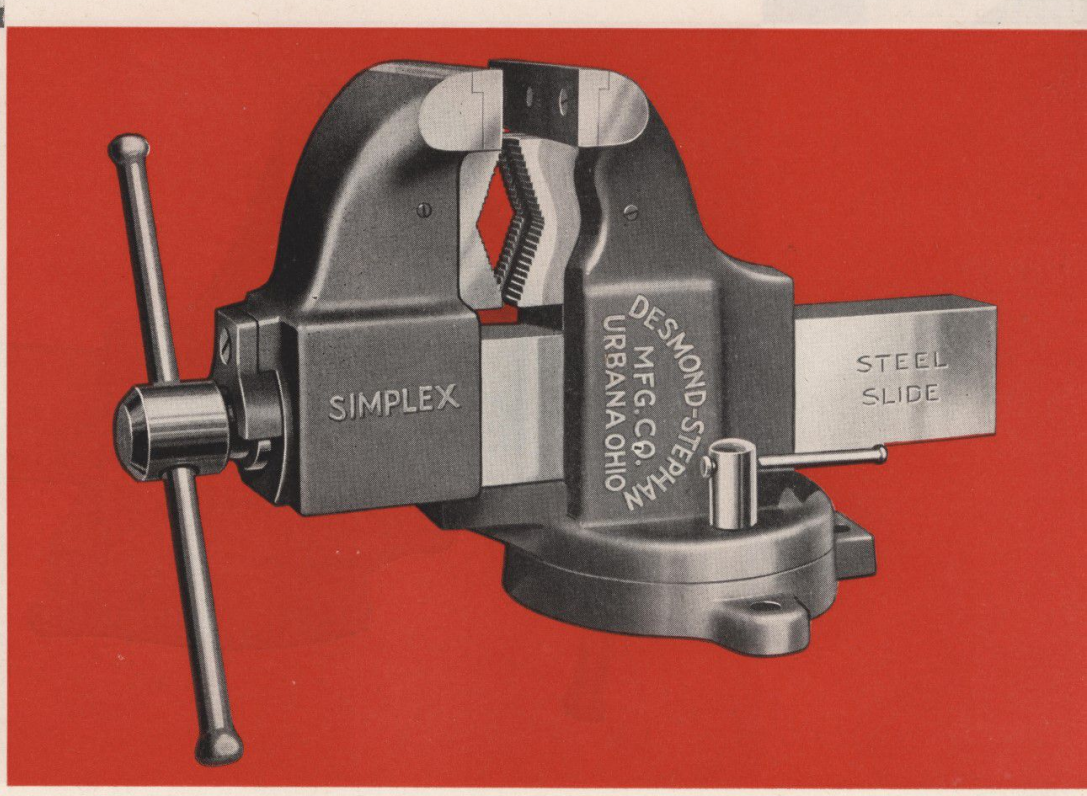

These models are designed for tool room use and particularly for holding tapered or irregularly shaped pieces. Gripping surface of back jaw swivels to hold irregularly shaped work, or may be locked parallel to the front jaw by means of a tapered pin.

| VISE NO. | JAW WIDTH | JAW OPENING | WEIGHT LBS. |
|---|---|---|---|
| 33-SJ | 3-3/4" | 5-1/2" | 36 |
| 41-SJ | 4-1/4" | 6-1/2" | 52 |
| 43-SJ | 4-3/4" | 7" | 71 |




# COMBINATION

## BENCH AND PIPE

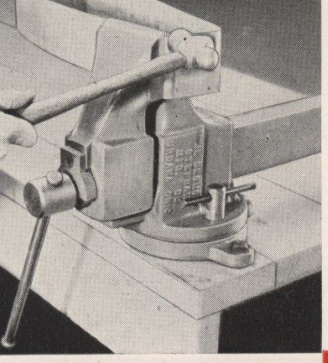



The strength of the exclusive steel slide is an important feature in the construction of the combination pipe vise. Due to the greater depth of the vise jaws and consequent strain imposed on the slide, the Desmond-Simplex steel slide vise offers the only complete assurance of an unbreakable slide.

Pipe jaws are accurately milled from high grade tool steel, properly hardened and designed to grip round bars or pipe starting at ⅛" pipe diameter.

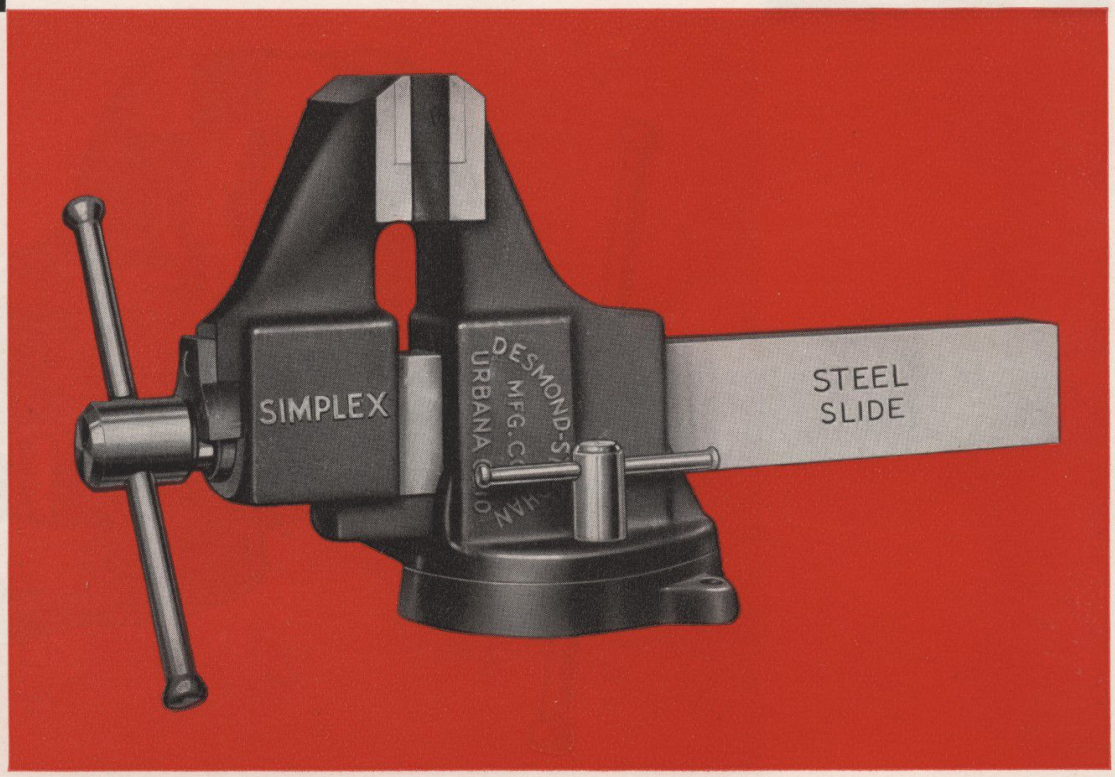
The full capacity of these extra deep jaws can be used without removing the pipe jaw inserts. The combination bench and pipe vise is ideally suited to marine applications, oil fields, construction jobs, and other uses which require a bench vise as well as pipe vise.

| VISE NO. | JAW WIDTH | HOLDS PIPE | WEIGHT LBS. |
|---|---|---|---|
| 33-CP | 3-3/4" | 1/8"–2-1/2" | 44 |
| 43-CP | 4-3/4" | 1/8"–4" | 80 |
| 61-CP | 6" | 1/8"–6" | 168 |



# SHEET METAL

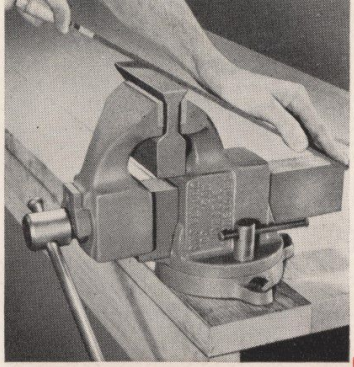
## OR PATTERN MAKERS




The greater depth of jaw and slide length enables this vise to grip extra wide and deep work. The jaws have smooth hardened steel inserts 2″ in depth. Total jaw depth 6½″.

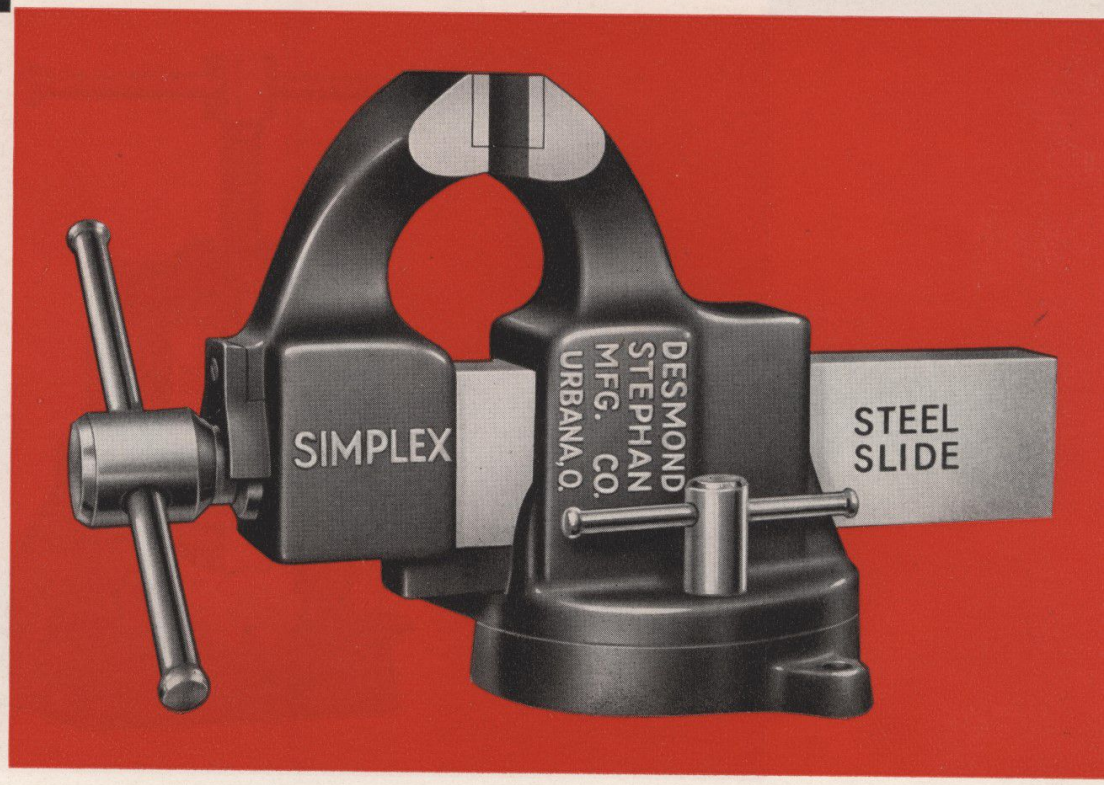
These large, smooth jaws provide a secure grip on sheet metal or wood without marring. The extra jaw opening provides capacity for large work.

| VISE NO. | JAW WIDTH | JAW OPENING | WEIGHT LBS. |
|---|---|---|---|
| 42-CPS | 4-1/2″ | 11″ | 70 |



# FILERS

## SWIVEL BASE

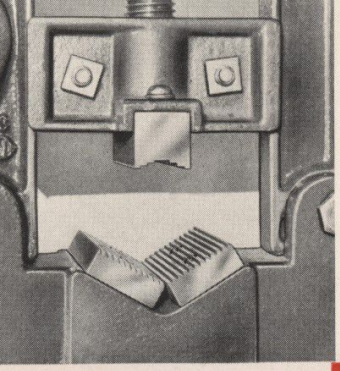



High arched jaws permit easy access to work. Jaw inserts are hardened steel, with either smooth or serrated surfaces. (Regularly furnished with serrated surfaces.)

The filers vise is designed for all filing or production operations where easy access is desired to all sides of the work.

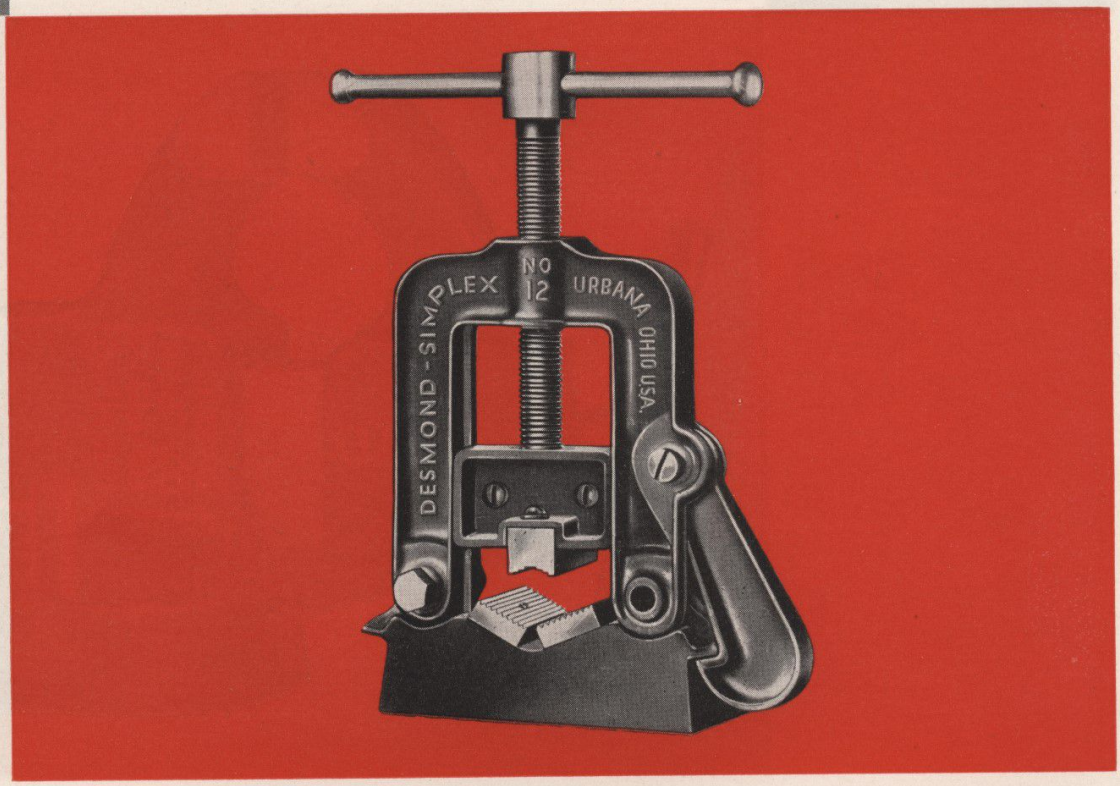
The double swivel model may be adjusted to both horizontal and perpendicular positions as listed for the positioning vises shown on page 15.

| | VISE NO. | JAW WIDTH | JAW OPENING | WEIGHT LBS. |
|---|---|---|---|---|
| Swivel Base | 41-FS | 4-1/4″ | 6-1/2″ | 48 |
| Double Swivel Base | 41-FSW | 4-1/4″ | 6-1/2″ | 55 |



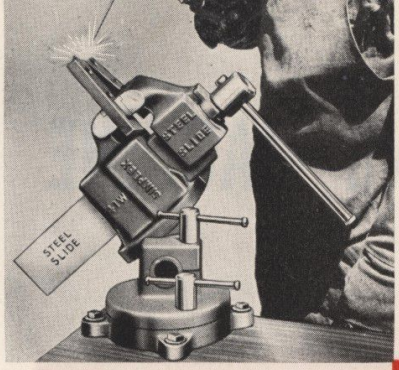
# HINGED PIPE

## NEW TYPE LONG JAW FACES



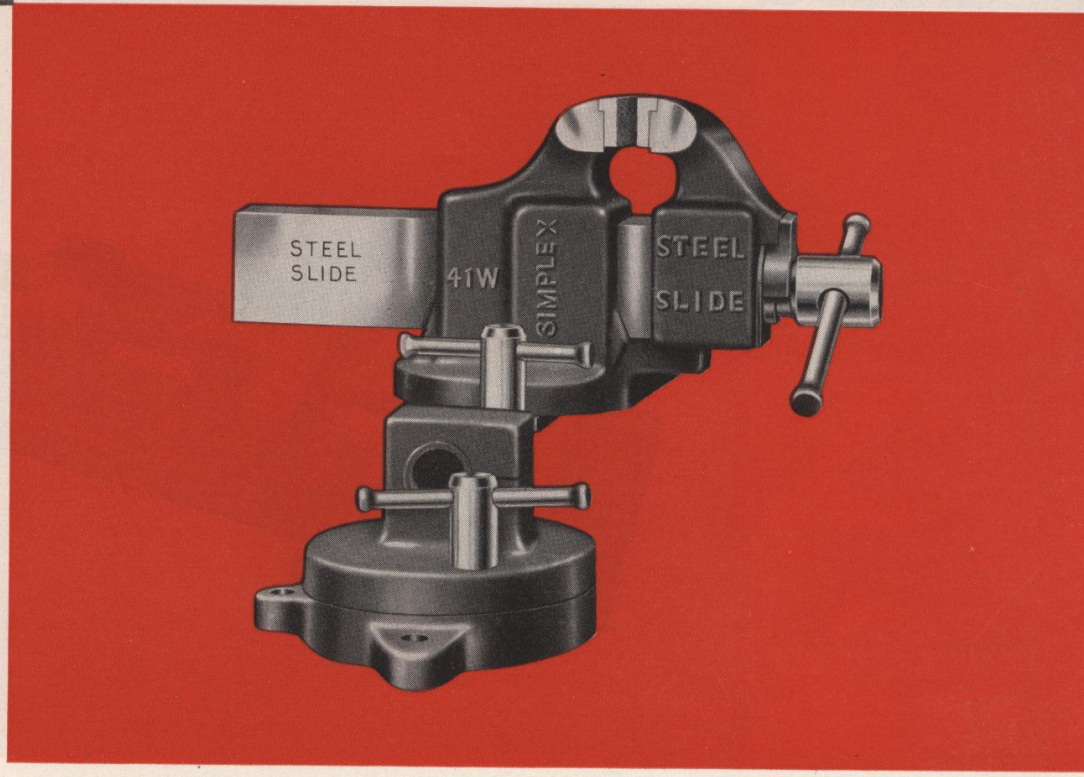

Constructed of high grade malleable iron accurately machined. Frame may be reversed to open on either side of base and the frame hook is self-locking. New type, long jaw faces, machined from tool steel and oil tempered, assures gripping power without kinking or crushing pipe or tubing.

| VISE NO. | CAPACITY | WEIGHT LBS. |
|---|---|---|
| 12 | 1/8″–2″ | 8 |
| 12-1/2 | 1/8″–2-1/2″ | 11 |
| 13-1/2 | 1/8″–3-1/2″ | 18 |
| 14-1/2 | 1/8″–4-1/2″ | 26 |




# POSITIONING

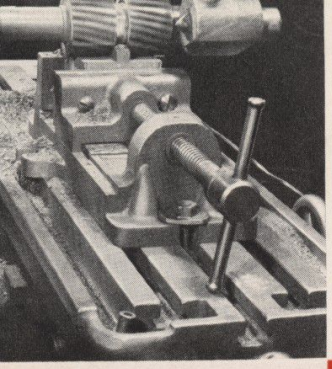
## DOUBLE SWIVEL TYPE




A regular heavy duty machinists vise with double swivel. Will rotate a full 360° in a horizontal and perpendicular plane. This makes possible a wide variety of positions for production assembly work, welding, and general repair applications.

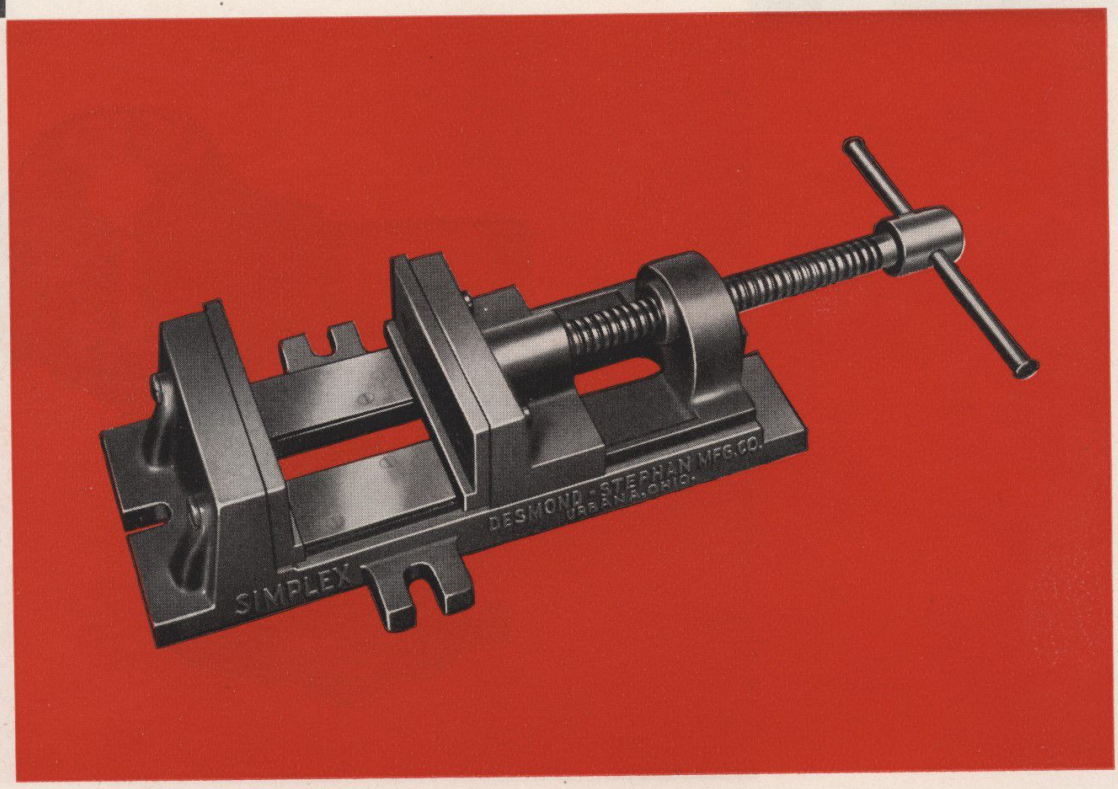
These vises can be quickly modified to a regular swivel base machinists vise.

| VISE NO. | JAW WIDTH | JAW OPENING | WEIGHT LBS. |
|---|---|---|---|
| 33-W | 3-3/4″ | 5-1/2″ | 47 |
| 41-W | 4-1/4″ | 6-1/2″ | 62 |
| 43-W | 4-3/4″ | 7″ | 74 |



# DRILL PRESS & MILLING MACHINE

## HEAVY DUTY

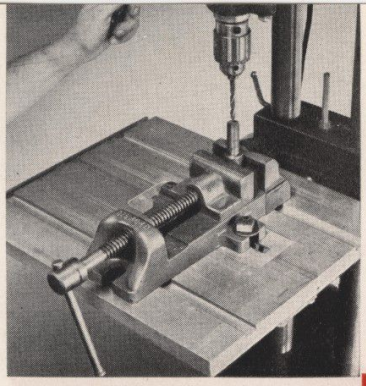



This drill press and milling machine vise will meet the requirements for rugged, heavy duty use in either milling or drilling applications.

These vises have exclusive hardened steel plates covering the work surface to prevent holes from being drilled into the vise body.

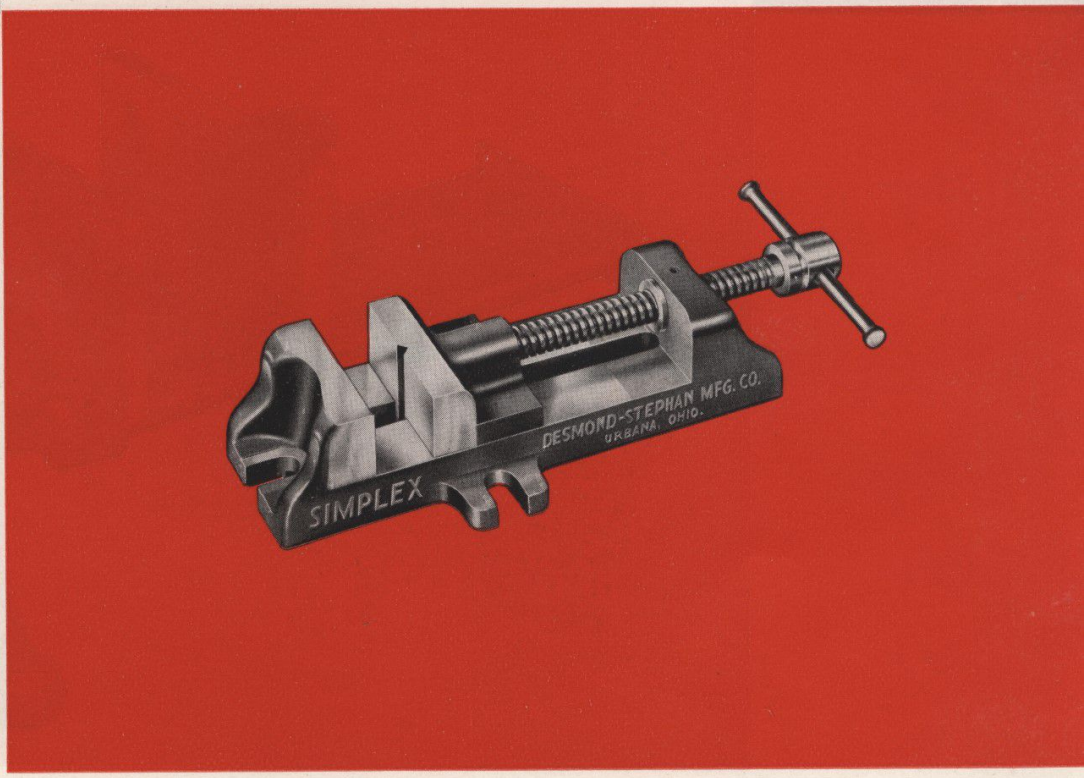
Four extra heavy flanges are provided for fastening vise to table. Two slots are milled into the bottom of the base for key way alignment. Main screw operates in easily replaceable threaded bushing. Jaw faces are hardened and accurately ground, available in off-set as well as straight jaw faces. Off-set faces are illustrated. Handle is one-piece non-pinching type. Overall length 17″. This vise is available in either regular semi-steel or solid steel.

| | VISE NO. | JAW WIDTH | JAW OPENING | JAW DEPTH | WEIGHT LBS. |
|---|---|---|---|---|---|
| Cast semi-steel | 6-DP | 6″ | 6″ | 2-1/2″ | 55 |
| Solid steel | 6-DPS | 6″ | 6″ | 2-1/2″ | 56 |



# DRILL PRESS & MILLING MACHINE

## MEDIUM DUTY

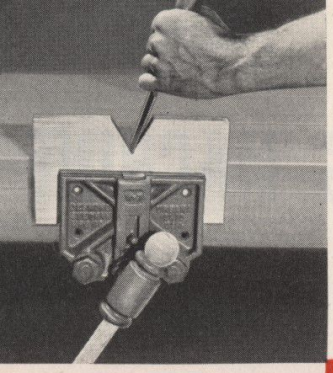



This low priced drill press and milling machine vise is strongly and accurately constructed for long service.

Four extra heavy flanges are provided for fastening vise to table. Two slots are milled into the bottom of the base for key way alignment. Main screw operates in a replaceable threaded bushing. Movable jaw has "V" slot for holding round pieces.

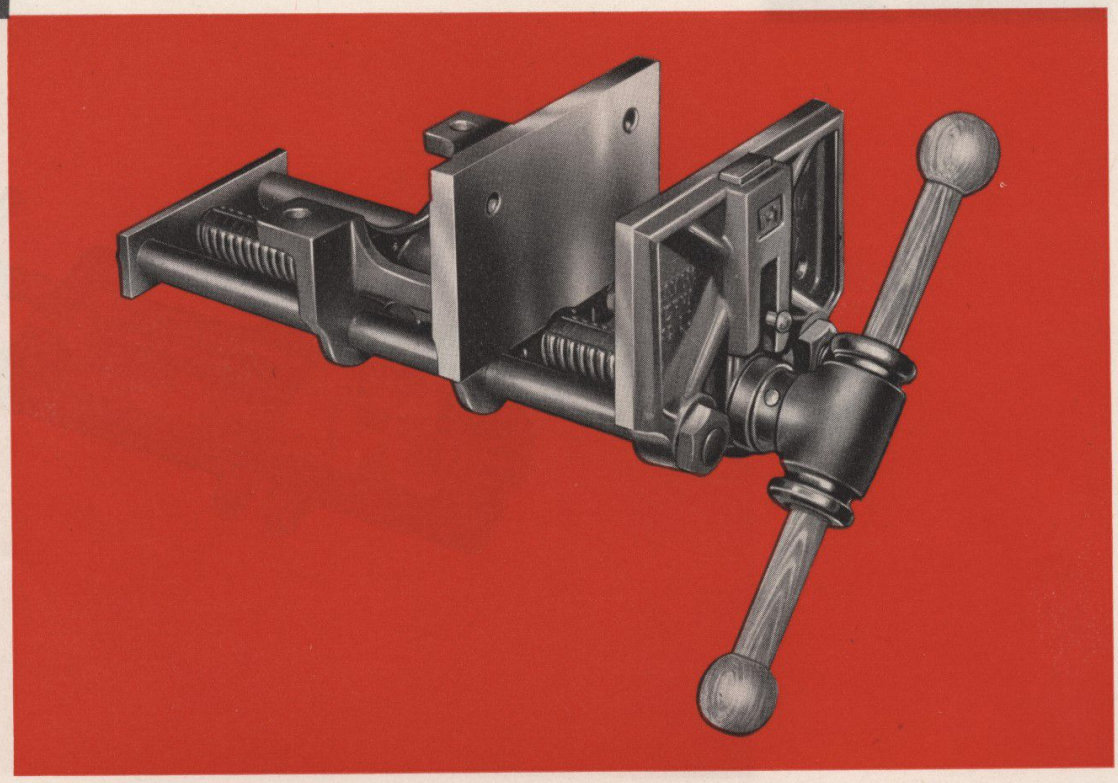
One-piece handle with non-pinching type ends. Overall length is 12-1/2".

| VISE NO. | JAW WIDTH | JAW OPENING | JAW DEPTH | WEIGHT LBS. |
|---|---|---|---|---|
| 3-1/2-DP | 3-1/2" | 4-1/2" | 1-11/16" | 16 |



# WOODWORKERS

## QUICK ACTING OR CONTINUOUS SCREW

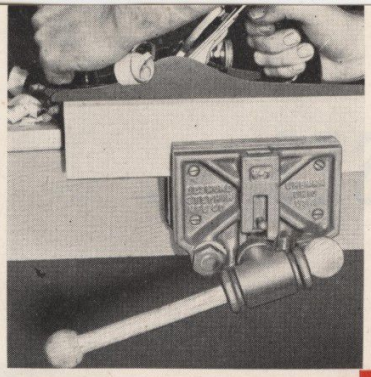


Heavy duty woodworking vise for all applications, with accurately ground jaw faces, tops and sides. Easy and rugged mounting provision. Guide rods are full ⅞″ diameter with extra strong tie bar for perfect alignment and smooth operation of movable jaw. Handle of selected hard wood with large, easy to grip, round knob ends. Jaws ground with slight incline to top edges for firm gripping of thin material.

Available with quick acting or continuous operating screw and with or without adjustable steel dog in front jaw.

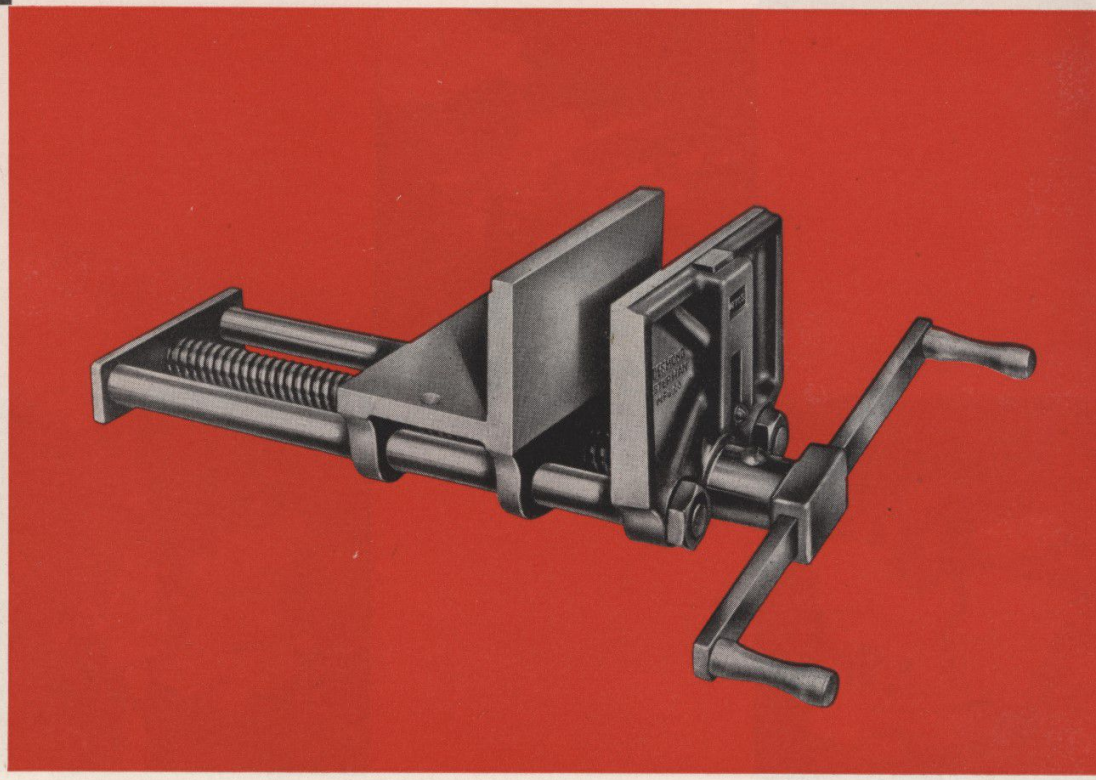
For use in factory production, schools, training institutes and for home and farm applications.

| | VISE NO. | JAW SIZE | JAW OPENING | WEIGHT LBS. |
|---|---|---|---|---|
| Quick acting type with dog in front jaw | W-7 | 4″ x 7″ | 9″ | 30 |
| | W-10 | 4″ x 10″ | 12″ | 33 |
| Continuous screw without dog in front jaw | W-7-C | 4″ x 7″ | 9″ | 27 |
| | W-10-C | 4″ x 10″ | 12″ | 34 |



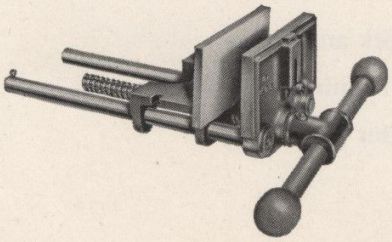
# WOODWORKERS

## STEEL HANDLE—CONTINUOUS SCREW



Steel handle models have all of the Desmond-Simplex features described for the wood handle models on the preceding page. For heavy duty use. Steel handles have right angle grips to permit quick spinning of vise screw for movement of front jaw. A spring brake, in handle head, holds handle for most convenient spinning position. Available with or without adjustable steel dog in front jaw.

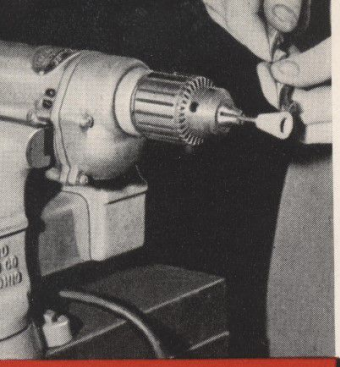
| | VISE NO. | JAW SIZE | JAW OPENING | WEIGHT LBS. |
|---|---|---|---|---|
| Adjustable steel handle without dog in front jaw | W-7-CS | 4″ x 7″ | 9″ | 27 |
| | W-10-CS | 4″ x 10″ | 12″ | 34 |
| Adjustable steel handle with dog in front jaw | W-7-CDS | 4″ x 7″ | 9″ | 28 |
| | W-10-CDS | 4″ x 10″ | 12″ | 35 |



## ECONOMY MODEL—CONTINUOUS SCREW

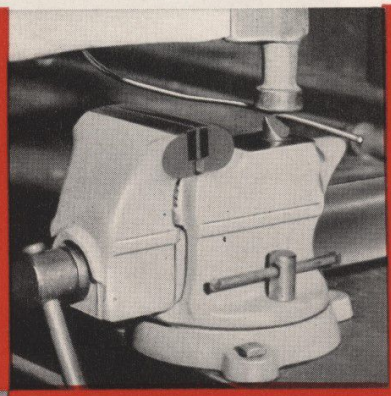
This smaller size vise, strongly constructed and accurately machined, is designed for general duty use in home work shops. Jaw faces, tops, and sides are ground. Has steel dog in front jaw. Continuous action screw. Hardwood handle.

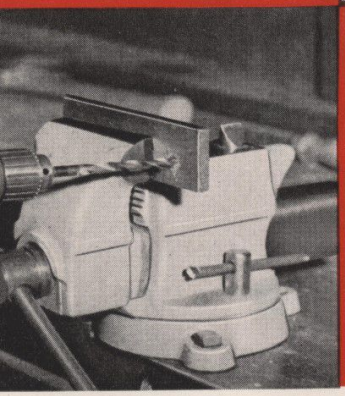
| VISE NO. | JAW SIZE | JAW OPENING | WEIGHT LBS. |
|---|---|---|---|
| W-6-C | 3″ x 6″ | 7″ | 10-1/2 |

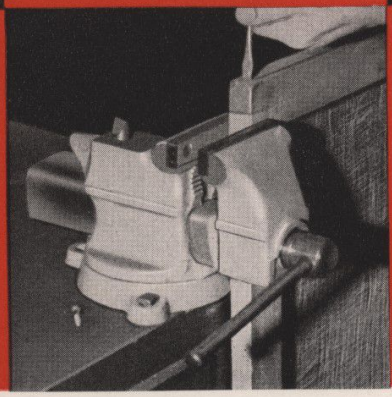


# UTILITY VISES . . .

## ECONOMY-PRICED







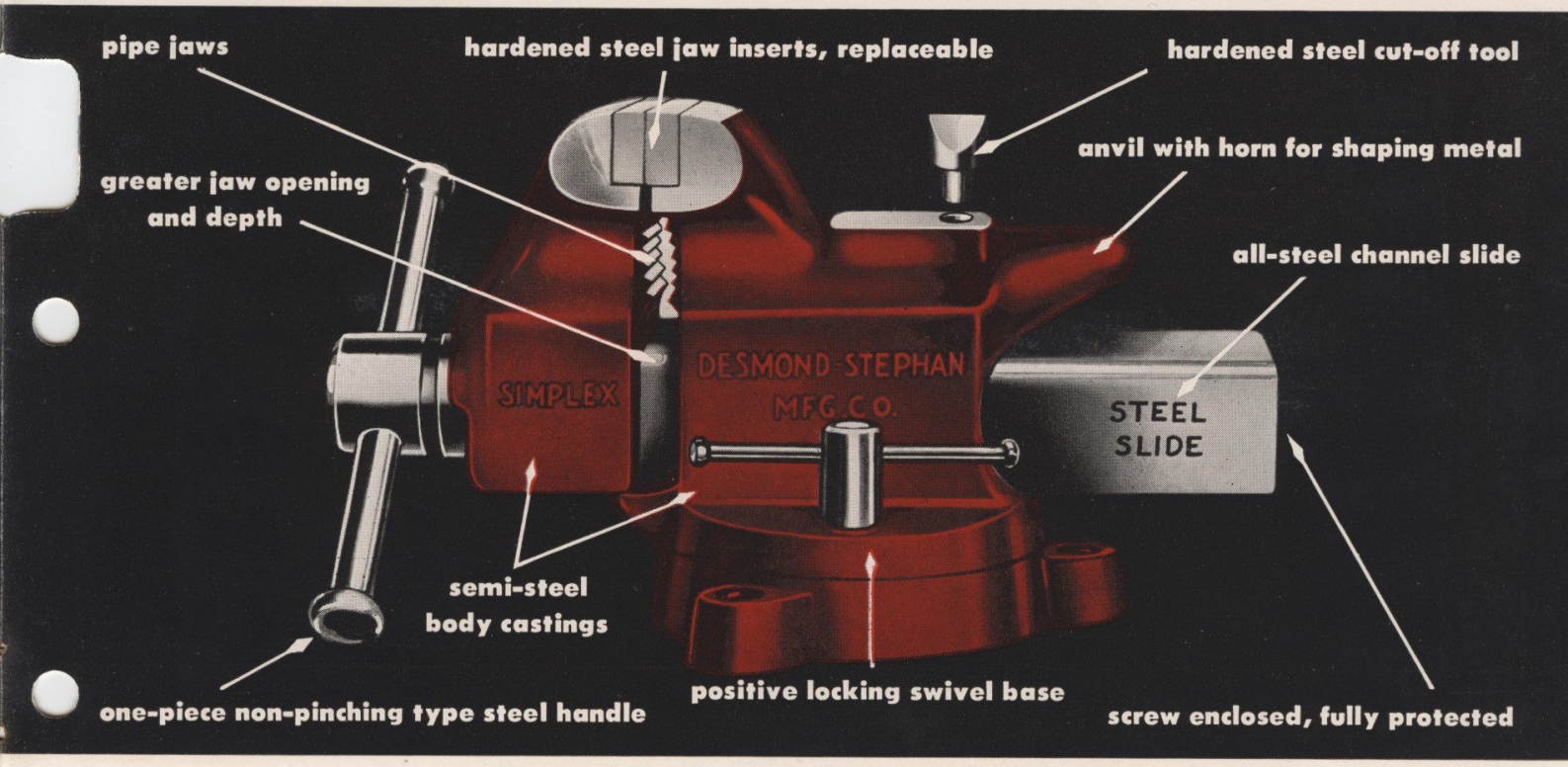
The Desmond-Simplex Utility Vise is a basic multi-purpose tool. Used as a "partner" with many hand and power tools.

All four sizes combine a swivel base, pipe vise, anvil and inverted chisel in one basic tool. Attractive design, rugged construction, and ability to withstand rough usage make them life-time investments for safe, accurate, and convenient shop work.

The four sizes suit all needs. No. 300 is primarily for model work and home use. No. 350 is for general home workshop use. Medium duty requirements in shop, garage and farm are met by Nos. 400 and 500, the latter providing extra jaw width and body strength.

# BASIC WORKSHOP TOOLS

## FOR HOME AND SHOP




Only Desmond-Simplex Utility Vises offer such a wide range of features which contribute to strength, durability, and versatility.

1. *Steel Channel Slide.* Extra width and height of this type slide gives greater strength than small bar slide. It eliminates bent slides and damage to screw.

2. *Square Thread Steel Screw.* Protected by slide from dirt, chips and damage, insuring long wear.

3. *Hardened Steel Replaceable, Jaw Inserts.* All sizes have hardened steel, serrated jaws for maximum grip and service.

4. *Hardie or Cutoff Tool.* Anvil with horn—useful for hammering rings, hoops, etc.

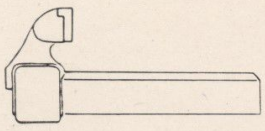
5. *Pipe Jaws* are part of the vise; cannot be lost.

6. *Swivel Base* allows vise to turn in most convenient direction. Lock bolt holds vise securely.

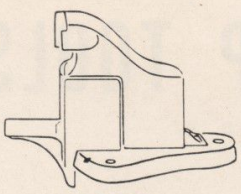
7. *One-piece Handle, Non-pinching Type.* Ends welded into ball shape, no loose balls to fall off.

| VISE NO. | JAW WIDTH | JAW OPENING | WEIGHT LBS. |
|---|---|---|---|
| 300 | 3″ | 3-1/4″ | 12 |
| 350 | 3-1/2″ | 4-1/2″ | 18-1/2 |
| 400 | 4″ | 5″ | 25 |
| 500 | 5″ | 5″ | 30 |

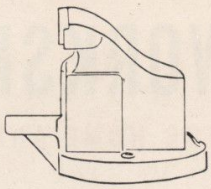
# MACHINIST AND COMBINATION VISE REPAIR PARTS



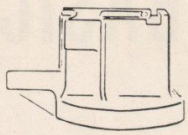
FRONT JAW AND SLIDE
MACHINISTS VISES



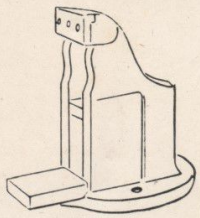
BACK JAW
STATIONARY BASE VISE



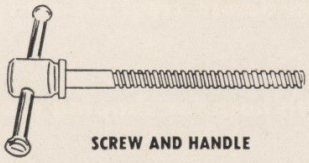
BACK JAW
SWIVEL BASE VISE



BACK JAW
SWIVEL JAW VISE



BACK JAW
COMBINATION PIPE VISE

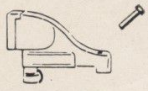


SCREW AND HANDLE

SCREW RETAINER

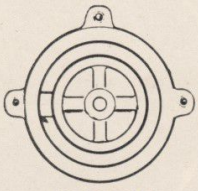
RETAINER SCREW

STEEL JAW



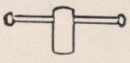
SWIVEL JAW AND TAPER PIN

PIPE JAWS FOR
COMBINATION PIPE VISE



SWIVEL BASE

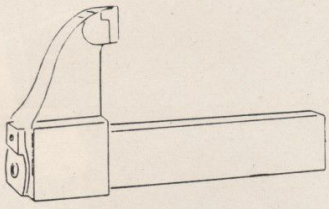
CENTER BOLT



SWIVEL
LOCKING LEVER

SWIVEL
LOCK BOLT

MAIN VISE NUT

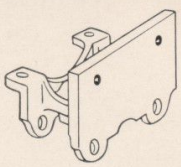


FRONT JAW AND SLIDE
COMBINATION PIPE VISE

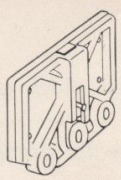
## HOW TO ORDER

Specify vise model number (cast on side of back-jaw) and part-name shown above.

# WOODWORKERS VISE REPAIR PARTS

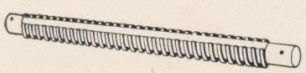


BACK JAW



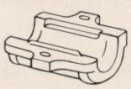
FRONT JAW WITH DOG

FRONT JAW WITHOUT DOG

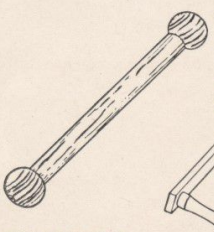


MAIN SCREW—QUICK ACTING

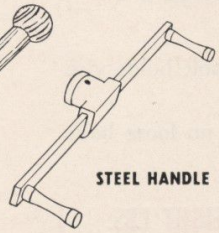
HALF NUT, WITH SPRING



HALF NUT
RETAINER



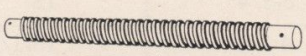
WOOD HANDLE



STEEL HANDLE

SCREW HEAD FOR
WOOD HANDLE

MAIN NUT,
FOR CONTINUOUS SCREW TYPE

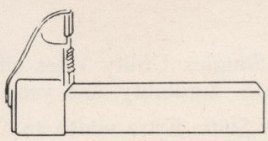


MAIN SCREW—CONTINUOUS

## HOW TO ORDER

Specify (1) vise model number (cast on front jaw), (2) vise type (continuous screw or quick acting, (3) part name shown above.

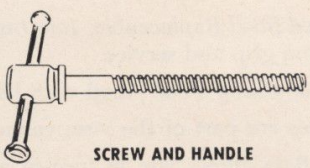
# UTILITY VISE REPAIR PARTS



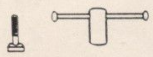
FRONT JAW AND SLIDE

JAW INSERTS

BACK JAW

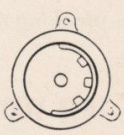


SCREW AND HANDLE



LOCK LEVER AND BOLT

SWIVEL
BOLT



BASE FOR
MODELS 300 AND 350

BASE RING FOR
MODELS 400 AND 500

BASE PLATE FOR
MODELS 400 AND 500

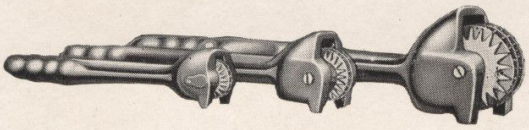
## HOW TO ORDER

Specify vise model number (cast on side of back jaw) and part name shown above.

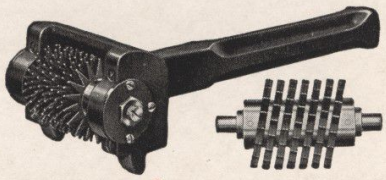
# OTHER DESMOND PRODUCTS

## THE ONLY COMPLETE LINE OF DRESSERS AND CUTTERS

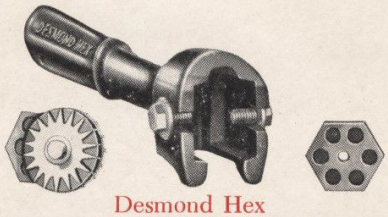
Ask your distributor for a copy of the Desmond dresser catalog or write to the factory for a copy and the name of nearest distributor.



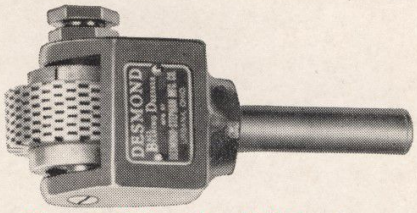
Desmond-Huntington



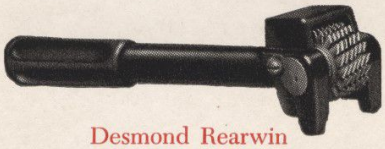
Desmond Heavy Duty



Desmond Hex

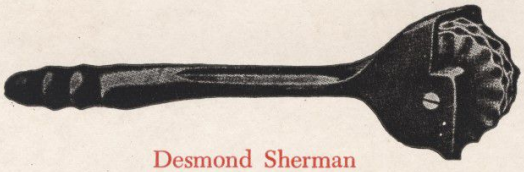



Desmond Precision Ball Bearing



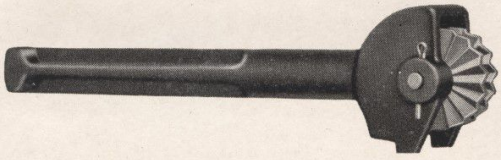
Desmond Rearwin

Desmond Diamond Tools and Nibs

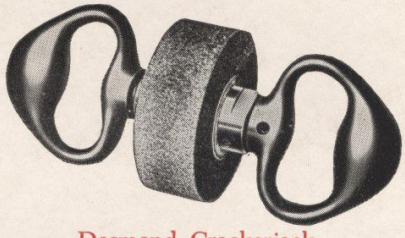


Desmond Sherman

Desmond Diamo-Carbo

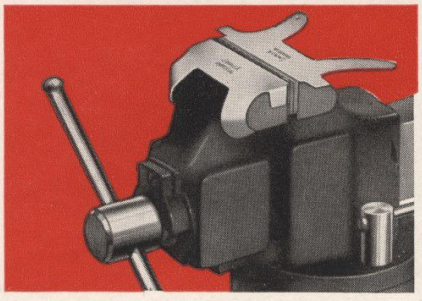


Desmond Zig Zag



Desmond Crackerjack

## SIMPLEX UNIVERSAL VISE JAW COVERS



Copper faces will not mar work. Will securely hold polished articles. Instantly attached and removed. Will fit any make of machinists and utility vise with the following jaw widths:

(3″)–(3¼″)–(3½″)–(3¾″)

(4″)–(4¼″)–(4½″)–(4¾″)–(5″)

Specify jaw width when ordering.

No46

## guarantee

Desmond-Simplex Vises are guaranteed for the life of the vise against defects in workmanship or material.

THE DESMOND-STEPHAN MFG. CO., URBANA, OHIO

## where to buy

Contact your Desmond Industrial Distributor. He knows your local needs and maintains a stock of Desmond products, with trained personnel to aid you in securing the right material for your requirements.

Desmond Simplex

Printed in U. S. A.

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